

(No Model.)

W. M. WHITING.

CORD ALARM FOR GRAIN BINDERS.

No. 341,298.

Patented May 4, 1886.

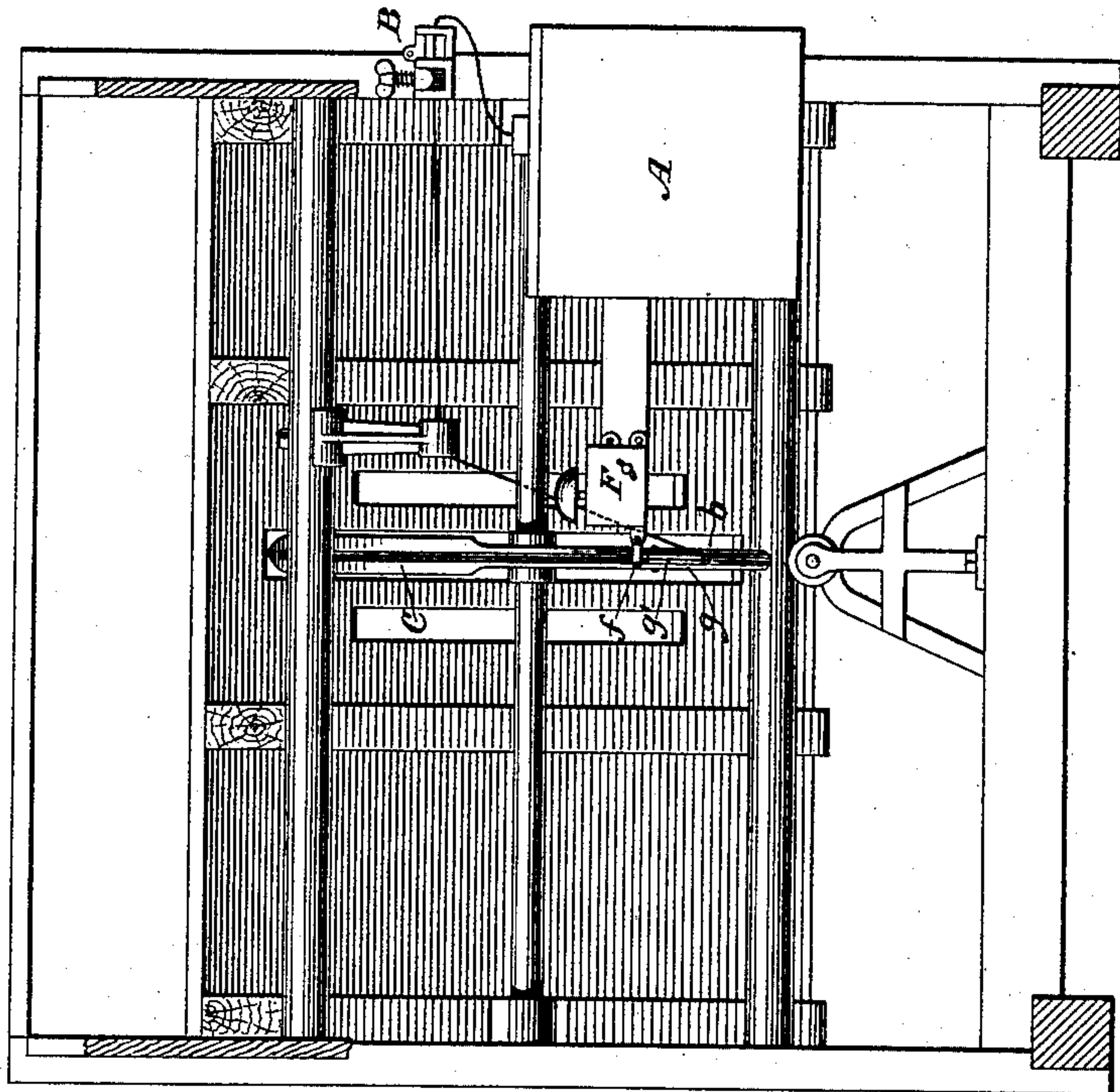


Fig. 2.

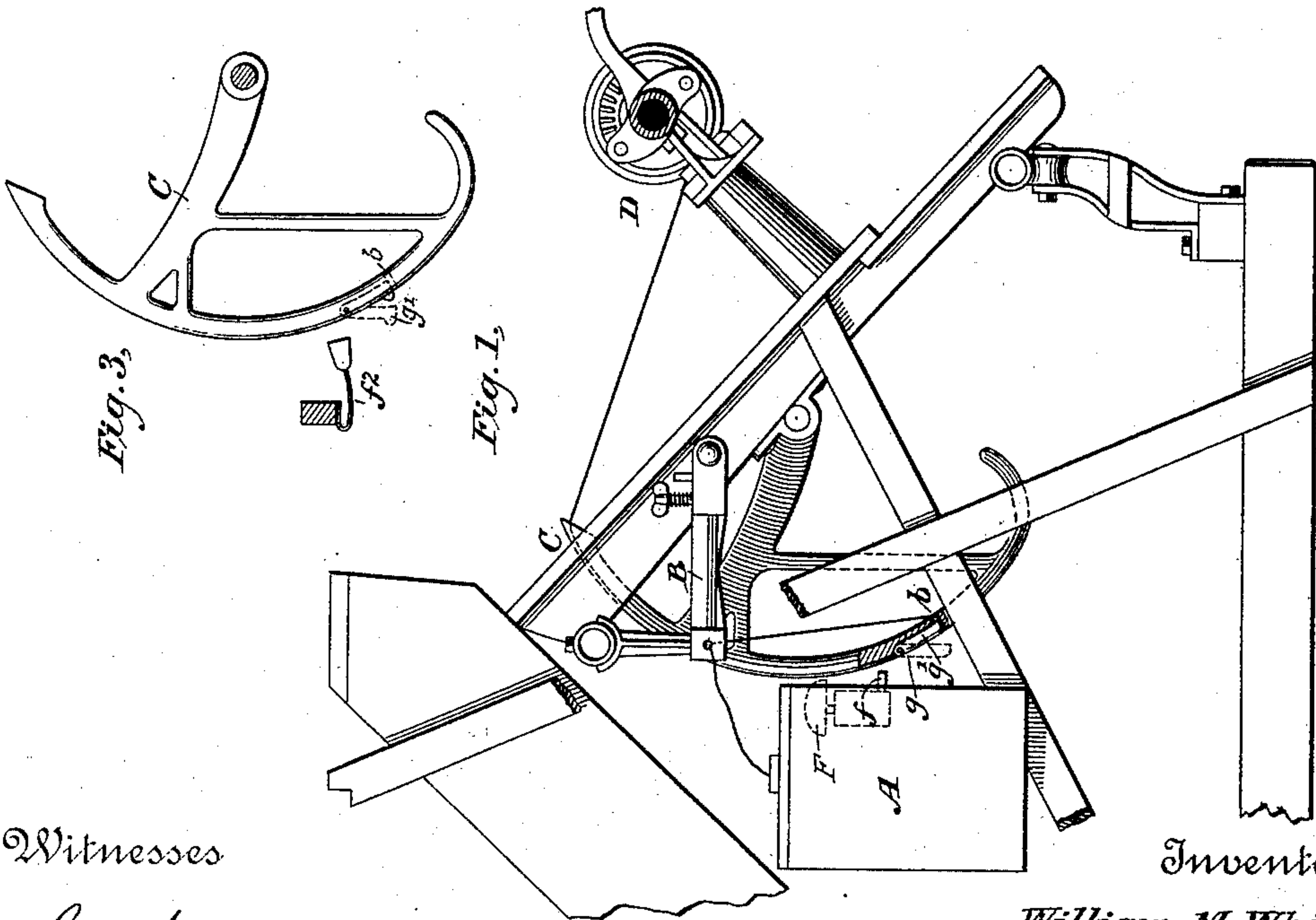


Fig. 3.

Fig. 1.

Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM M. WHITING, OF NEW YORK, N. Y.

## CORD-ALARM FOR GRAIN-BINDERS.

SPECIFICATION forming part of Letters Patent No. 341,298, dated May 4, 1886.

Application filed June 6, 1885. Serial No. 167,872. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM M. WHITING, a citizen of the United States, residing in the city of New York, in the county and State of New York, have invented certain new and useful Improvements in Cord-Alarms for Grain-Binders, of which the following is a specification.

My invention is designed to provide means for giving an audible signal to the driver of a grain-binder when the cord or binding material is broken or becomes exhausted. So long as the cord is being supplied the alarm is restrained from action by the tension of the cord itself, but immediately upon its relaxation a detent is freed, which causes the alarm to be operated.

In a patent granted to me May 12, 1885, there is shown and claimed a cord-alarm wherein the alarm is engaged by the cord between the tension device and the cord-holder.

In the present invention the detent for engaging the alarm is placed upon the needle itself between the tension device and the knotter-head.

In the accompanying drawings, Figure 1 is a rear elevation of the binding-table, and Fig. 2 is an elevation, partly in section, of the knotter-head of the binding-table. Fig. 3 illustrates a modification.

From the cord-supply box, which is shown at A, the cord is led to the tension device B and through a guide-eye, *b*, of the needle or binder-arm C. The cord leads through the needle and out to the knotter-head D, by which the end is firmly held. Within the needle at a point, *g*, there is formed a narrow opening, and a pivoted section, *g'*, is inserted therein. The cord passing across this section normally holds it in the line of the needle, and does not in any way impede its movement. When, however, the cord is exhausted, or the tension is relaxed by the breaking of the cord, the pivoted section *g'* falls out of the line of the needle, either by force of gravity or by the action of a spring, (not shown,) and projects in the manner indicated in dotted lines. The to-and-fro movement of the needle will then cause the detent to engage an arm, *f*, which in turn causes an audible signal to be given in any convenient manner.

By preference the signaling device consists

of an alarm-bell, F, of any convenient construction, which is wound up manually, and its escapement is detained by the arm *f*. When, however, the detent *g'* strikes the arm *f*, the arm is released, and thus the signal is given. Instead, however, of having an alarm device which will wind up, a suitable bell may be placed upon a yielding spring, *f''*, as shown in Fig. 3. The detent with its to-and-fro movement strikes this bell, and thereby gives an alarm.

I do not intend to confine myself to the precise construction herein described, as many changes in organization will readily occur to those skilled in the art, and may be employed to attach the invention to other styles of binders than that shown here.

I claim as my invention—

1. In a grain-binder, the combination, with the cord-holder, a tension device, and the needle, of an alarm device, and an arm upon said needle for actuating said alarm device, which arm is restrained by the cord passing through said needle.

2. The combination, substantially as hereinbefore set forth, in a grain-binder, of a cord-holder, the binding-cord, a needle, a pivoted section of said needle held out of action by the cord, and an alarm device actuated by said section when released.

3. The combination, substantially as hereinbefore set forth, in a grain-binder, of a pivoted needle, the binding-cord passing through said needle, a pivoted arm supported in said needle, a manually-wound alarm device released by the action of said arm upon the breakage or exhaustion of the cord and the consequent release of said arm.

4. The combination, substantially as hereinbefore set forth, with the needle of a grain-binder, of a signaling device, means for operating said device carried upon said needle and normally restrained from action by the tension of the cord passing through said needle.

In testimony whereof I have hereunto subscribed my name this 22d day of May, A. D. 1885.

WILLIAM M. WHITING.

Witnesses:

DANL. W. EDGECOMB,  
CHARLES A. TERRY.